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HIGHER EDUCATION AND NATIONAL DEFENSE[1]

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THIS paper asks and attempts to answer four questions: (1) What do we mean by defense? (2) What did the colleges do for defense in 1917–18? (3) What are we doing now? (4) What can registrars do?

1. *What do we mean by defense?* Answers come from many quarters. What we in education must do to be saved runs the whole gamut of prescription from moral and intellectual regeneration of the individual to the details of mass courses in vocational training. Probably the complete answer is to be culled from all of these and does not reside in any one.

Here is one definition. In June, 1940, the American Council on Education, after much committee deliberation, issued a pamphlet[2] which was widely distributed. Therein national defense was conceived to mean "(1) the maintenance of military and naval forces at an appropriate level of efficiency; (2) intelligent conservation and utilization of the nation's resources, both human and natural; (3) development of the health and physical status of the people to the highest possible level; (4) development, through education, of the native capacity of the population for individual and social well-being to the highest possible level of effectiveness, including mental alertness, the growth of moral and ethical values in the individual, the development of a sense of social responsibility and of capacity for effective cooperation."

Now what is the function of higher education in such a program of national defense? It is this: (1) to provide the nation *at once* with personnel and services which the responsible officers of the government, both military and civil, regard as immediately necessary, (2) to plan to meet additional needs in the *near* future for such personnel and services, (3) to maintain as nearly as may be possible and wise the normal processes of education in order to assure to society in the *long* future an adequate supply of trained men and women for professional and other activities. Our first concern is that our culture and way of life shall survive; our second is that it shall be handed on.

2. *What did the colleges do for defense in 1917–18?* What were some of the difficulties that beset higher education in those troublesome years? In those years, of course, we were engaged in a *declared* war, and the emergencies of armed conflict rested heavily upon us. But a mariner having passed through an unusually heavy storm may use the experiences of that storm to be better prepared for another.

While not in a state of declared war at

[1] Based on an address delivered before the American Association of Collegiate Registrars at the Drake Hotel, Chicago, Illinois, April 15, 1941.

[2] *Education and the National Defense* (Washington: American Council on Education, June, 1940).

present, we nevertheless do have to make adjustments to selective service; we are witnessing voluntary enlistment in the armed forces on a large scale; we are seeing members of our faculties drawn into government service in considerable numbers.

Immediately after war was declared on April 6, 1917, the colleges and universities began to plan for meeting the emergency. Wise counsel came from high places. In speaking to a meeting of college presidents called by the Advisory Commission of the Council of National Defense, in Continental Hall, Washington, May 5, 1917, the Secretary of War, Newton D. Baker, said this:

> . . . We do not want to chill enthusiasm. We want to preserve enthusiasm and cultivate it and use it; but we do want to be discriminating in our enthusiasm, and prevent people getting the notion that they are not helping the country unless they do something different, which very often is not the case at all. The largest usefulness may come from doing the same thing—just continuing to do it. Now it is not unnatural that there should be these ebullitions of feeling, this desire to change occupation as a badge of changed service and devotion to ideals; but you gentlemen can exercise a very steadying influence in that regard.

This meeting passed a number of resolutions, among them one which asked for "a statement of a comprehensive policy of cooperation between the government and the universities, colleges and institutions, throughout the duration of the war. The statement should be accompanied by suggestions to be as explicit as possible."[3] Specifically, the college presidents asked information on the plans of the government concerning higher education, the educational experiences of the allied countries, ways in which education should organize to fulfil the needs of the government.

President Wilson was aware of the situation. On July 20, 1917, he wrote to the Secretary of the Interior, Franklin K. Lane, a letter from which these sentences are taken:

> . . . It would, as you suggest, seriously impair America's prospects of success in this war if the supply of highly trained men were unnecessarily diminished. There will be need for a larger number of persons expert in the various fields of applied science than ever before. Such persons will be needed both during the war and after its close. I therefore have no hesitation in urging colleges and technical schools to endeavor to maintain their courses as far as possible on the usual basis . . . to the end that the country may not lack an adequate supply of trained men and women.[4]

In spite of the request of the colleges for a definite recommendation for coordination, the situation still remained confused. In 1917, Samuel P. Capen, now chancellor of the University of Buffalo, was specialist in higher education in the U. S. Bureau of Education. He summed up the situation twenty-four years ago thus:

> For seven months after the declaration of war little if any progress was made toward the coordination of the higher institutional establishment with the activities of the government charged with the prosecution of the war. College officers continued to receive bewildering and contradictory instructions from different government offices. The information services of the Bureau of Education and the States Relations Service of the Department of Agriculture proved an inadequate guide to institutional policies. Committees worked at a single problem, solved it or found it insoluble, and disbanded. Meanwhile student bodies melted away. Losses of 40 per cent. in enrolments and even higher began to be reported by the autumn of 1917. Instructors entered the military service or were drawn off for nonmilitary activities. As far as the responsible officers of colleges and universities could see, their institutions were being disregarded by the government departments. There was no evidence of the formulation of a government policy for the use of the universities. In January, 1918, therefore, delegates of all the principal national associations of higher institutions met and established the Emergency Council on Education, later called the American Council on Education. The Council set up an office in Washington and kept in daily contact with the operating services.
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> The effect of all of these activities finally led to

[3] Parke Rexford Kolbe, "The Colleges in War Time and After," pp. 28–29. New York: D. Appleton and Company, 1919.

[4] P. R. Kolbe, *op. cit.*, pp. 49–50.

the establishment in the War Department in February, 1918, of the Committee on Education and Special Training. Almost from the start this committee became the official link between the government and the colleges and universities. The committee was composed of three officers of the army. Attached to it was an advisory board of seven civilians representing educational interests. The committee and its advisory board held daily joint meetings and came to be the directing and advising agency of all war-time activities of the higher institutions.[5]

The first announcement of the government's plan to keep young men in college came on May 8, 1918. The Secretary of War issued a circular letter to presidents of institutions of collegiate grade saying that the War Department would set up a comprehensive system of military training in September, 1918. The two objectives of this plan were: "first, to develop as a great military asset a large body of young men in the colleges; and, second, to prevent unnecessary and wasteful depletion of the colleges through indiscriminate volunteering, by offering to the students a definite and immediate military status."[6]

There was to be a unit in each institution, men students 18 to 21 were to be encouraged to enlist, but the government would not call members of training units to active duty until they had reached the age of 21 years. On June 29, 1918, the Adjutant General of the Army issued a statement to college and university presidents outlining the Students Army Training Corps, which would carry into effect the objectives mentioned above. On August 28, 1918, a statement from Colonel R. I. Rees gave October 1, 1918, as the approximate date for induction into the SATC. By voluntary induction into the SATC the student became a soldier in the Army of the United States with the pay of a private, and subject to military law and to military discipline at all times. A course on the underlying issues of the war was required.

On September 25, 1918, there came the instructions that "all curricula are to be based on quarterly courses with terms of 12 weeks each, including examination periods."[7] What a panic that caused! The SATC had many faults, but it probably saved a number of colleges from bankruptcy, besides enabling young men to continue their college course and at the same time serve their country.

The American Association of Collegiate Registrars met in April, 1917, at the University of Kentucky. Remember, this was after we entered the war. Throughout the first day, the subjects of discussion were grades and grading systems; on the second day we talked about admissions, attendances and absences, fees, permanent records, machinery of registration, instructors' reports of standings; finally, on the morning of the third day, there were three one-hour discussion periods, the third and last item before luncheon being "The Registrar's War Problems." The program for the discussion gives three headings: (1) student withdrawals, credit rebates; (2) forecasting enrolment; (3) the registrar's office as a recruiting station. The proceedings show that we talked mostly about student withdrawals for agricultural service, for ambulance service, for enlistment, and about the desirability of granting full credit for the semester in which the student withdrew for service. There were no formal papers on the war and its relation to higher education.

What did the colleges do for defense in 1917–18? The answer is obvious. Higher education did not plan effectively, nor organize its forces, in time to make itself fully felt as a valuable resource of government. And federal agencies were slow and inept in dealing with higher education.

[5] S. P. Capen, *The Educational Record*, 21: 44–45, January, 1940.

[6] The Advisory Board, *Committee on Education and Special Training: A Review of its Work During 1918*, p. 57. Washington: War Department, June, 1919.

[7] The Advisory Board, *op. cit.*, p. 113.

3. *What are we doing now?* The full answer is too long for recital here. But the cardinal feature of our activities is that government and education are conversing daily regarding the needs of the former and the resources of the latter. There is planning. There is mutual confidence, though not always agreement. There is a two-way flow of ideas. How does this come to be? I shall mention the work of three agencies. Let me speak first of the American Council on Education. That organization began, as I have said, during the former World War. With that background, with its location in Washington, with George F. Zook, former U. S. Commissioner of Education, as its president, it got an action program under way early in the present emergency.

In September, 1939, Dr. Zook called educators to meetings in New York and Washington to consider problems of education and defense. Letters were sent also to approximately 100 leading educators asking their judgments on matters related to the developing emergency. Two months later, a special grant of money enabled us to add Francis J. Brown to our staff, to give his full time to the task of liaison between the council and the government. In December, 1939, and January, 1940, additional conferences were held and Dr. Brown visited a number of colleges and universities, interviewing more than 200 members of faculties to find out their problems. In February, 1940, a questionnaire was sent to 700 educators, again asking their judgments on which of several proposed activities of the council would be most immediately helpful. Some of these proposals were: (1) to prepare instructional materials; (2) to formulate principles of cooperation between government and education; (3) to analyze news-gathering and news-disseminating agencies; (4) to adapt existing materials for more effective use. March and April, 1940, saw more conferences with officers of associations representing education at all levels.

In May and June, the pamphlet, *Education and National Defense*, received its final revision, and was issued. We distributed 25,000 copies free. The council's committee met with a committee of government officials appointed by President Roosevelt to plan cooperative action. In July, council officers appeared before Congressional committees urging modifications in the Burke-Wadsworth Bill, which later became the Selective Service Act. That month, also, we issued the first number of our bulletin, *Higher Education and National Defense*. We now distribute free 4,500 copies of each number. To date eleven bulletins have been prepared in close cooperation with the National Headqarters of the Selective Service System. They have given college officials definite procedures to follow in dealing with local draft boards in regard to either postponement of induction or occupational deferment of the individual student.

Last August, the council accepted the proposal of the NEA that both organizations jointly invite 55 national associations in education to membership on a new National Coordinating Committee on Education and Defense. Five more were added later.

That big, comprehensive committee is the second of the three agencies. It has met twice, has held one national conference, attended by 500 persons from educational institutions in 41 states. But the chief work has been done by an executive committee, which in frequent meetings has kept in close touch with the government and with educational interests. This executive committee serves in a dual capcity; it is also the Committee on Education of the Joint Army and Navy Committee on Welfare and Recreation.

Five active subcommittees have reported through the American Council bulletin:

1. A committee on teaching materials has already issued six pamphlets on current problems for use in high schools.

2. Another on pre-service education for draftees is preparing five pamphlets to help young men prepare themselves for army life.

3. A third is studying what can be done in the defense program by women college students.

4. A fourth is working to improve the general training program of enlisted men.

5. The fifth and most active is the committee on military affairs. Through Dr. Brown, it has kept in touch with selective-service officials and has held many conferences with educational and government officers and with legislators concerning deferment of students and faculty men.

The committee on military affairs also arranged the recent conference in Washington on education and defense, mentioned above. It has discussed such matters as summer schools of ROTC units for non-ROTC students; a composite defense course to include meteorology, map-making and reading; military geology to be given by regular faculty members, with or without some military training.

Now a brief glance at what the third agency, the federal government, is doing. Chiefly, it is pointing up the need for trained personnel and helping the colleges to meet that need. Under the general direction of Fred J. Kelly, chief of the Division of Higher Education, U. S. Office of Education, short intensive engineering courses of college grade have been established in 137 engineering schools. Some are full-time courses, some part-time; some are six months' courses, some several weeks' courses. In content, they range from a basic course like engineering drawing to an advanced specialty such as exterior ballistics. The federal government reimburses the schools for costs of instruction; the student pays for text-books and minor supplies. These courses are not intended to disturb the regular engineering curricula. College credit is at the discretion of the institution. At the latest report, more than 75,000 students were enrolled.

One of the most significant activities of the U. S. Office of Education, one that shows the range and the depth of its resourceful interest in problems of defense, is to be found in a series of conferences that underlie these engineering and other short intensive courses. The reader will be interested in the planning methods used. In the field of nursing, for example, Dr. Kelly appointed a committee to work under the chairmanship of one of our most competent leaders in nursing education. The committee prepared an outline of procedures necessary to give the nation an adequate supply of trained nurses. The plan sketches the needs in terms of nursing service: to reduce dangers from communicable disease and from accident, particularly in crowded industrial centers; dangers growing out of migration of workers and their families; dangers from inadequate housing and sanitary facilities, and dangers from mental strain. The plan calls for 10,000 additional nurses in 1941 for civilian hospitals, military demands, public health, disasters, private duty, teaching. The plan, moreover, shows how and where additional nurses can be trained. It suggests budgets, and outlines administrative procedures.

Other such planning reports cover chemistry (in addition to chemical engineering); athletics; physical education and recreation; personnel administration. As illustrating the difficulties in the field of personnel administration Dr. Kelly cites an airplane plant that had 3,000 employees last summer. At the present writing, it has 16,000; soon it will have 32,000. Where is the staff to adjust these 29,000 new employees to their jobs, to see that the abilities of each employee are properly used? The bottleneck is tests. The colleges and universities can train test-makers and test-users. That whole problem is being studied imaginatively, realistically, carefully.

The Army wants 26,000 more pilots, the Navy 14,000 more, 20 to 26 years old. They

are wanted within a year. The seven months' course of training in flying conducted by the armed services is now open to high-school graduates. The requirement of two years of college or its equivalent no longer obtains. This will be the routine: the high-school graduate will first enlist, passing the rigorous physical examination necessary thereto. Some of the men thus accepted may be assigned to technical schools for basic courses in the sciences underlying aeronautics. The details of this basic training are now being worked out.

The three points for us to keep pridefully in mind are: (1) that the U. S. Office of Education is alert to the needs of government for personnel with specialized training; (2) that the office is inviting most able men on the college and university staffs to help plan these specialized training programs, and (3) that the office is, where possible, securing and allocating funds to carry out the programs.

Nor is this all. The U. S. Office of Education has under preparation a series of 27 pamphlets on education and the national defense, each prepared by a specialist who may or may not be in the employ of the government. Titles of some of the pamphlets in the field of higher education are: "A Guide to the Study of Latin American Relationships," "Sources of Information on Defense," "Interpreting Democracy."

Loan materials form another service. In packets or singly, many pamphlets and booklets may be borrowed by colleges and schools for two weeks, free. A number of titles on higher education are included in this Information Exchange Service.

This must suffice as an answer to my third question—What are we doing now? Obviously I have not here called the roll of all defense plans that will reach out from Washington to the campuses throughout the country, and I have not even mentioned the local planning now going forward under defense councils and committees in the institutions of higher education.

4. Now to my last question, *What can registrars do?* The answer is simple. They *can* do, *will* do all that needs to be done. I have tried to give some intimation of the diversity and complexity of the problems confronting the registrar. For there will be more contacts with government, more special courses, more extra instructors, more irregular students. And the credit-seeking ghosts of these will come back to plague the registrars for years.

All of us who were registrars in 1917–18 would adjure the registrars of to-day to think and plan and keep plentiful records of such things as these: special courses in the secondary school; special courses in the professional school; the content of special officer-training courses in the Army and Navy; correspondence courses for enlisted men; leaves of absence; substitute instructors; special uses of plant and facilities. All these need careful planning and ample recording. No prophetic eye is required to see that these are only the beginnings of swifter and more direct procedures to gear higher educational enterprises of every sort into the defense effort.

We all share responsibility for some things that remain to be done. Take health, for instance. Here is an ugly fact that Brigadier General Hershey told us in a committee meeting a few weeks ago. He said that of the men called into the Army under Selective Service, 32 per cent. are being rejected as physically unfit for military service. What is wrong with our teaching in health and hygiene, with our programs in physical education when that is the general situation?

Another field demands serious consideration. A while ago, President Seymour, of Yale University, was quoted as saying:

> There is justice in the complaint of the undergraduate that his academic experience has not pro-

vided him with a faith. . . . It is likely that the present emergency will revive faith in our American way of life and enthusiasm for its preservation and development. The universities must take the lead in this resurgence of conviction, which alone can give the Nation a unifying force.[8]

Not long ago, Lord Halifax, in an address described the devotion of German youth to the Hitler régime. The Ambassador entreated the democracies to realize the power in such devotion, and to nurture it in every reasonable way.

My own contacts with undergraduates are not numerous these days. But, sitting in many committees of college teachers, I have shared their disappointment, occasionally their distress as they reported the undergraduates' apparently rather slight concern for the common defense and for the general welfare of the nation. I hope these impressions are wrong. But if they are not, then I think our higher institutions should do more than they are now doing, much more, to give undergraduates a better understanding of what it has taken in blood and treasure to make men free, to give them a deeper devotion to the present task of preserving that freedom, and a more rugged faith that we can build a better world.

Driving through the hills of Maryland a few nights ago, I was impressed with the glass-studded road signs that marked curves. The signs themselves carried no light, but catching the lights of my car, they gave me warning. The nations seem to be traveling down dark ways. The light of history, understanding and faith can illumine the signs put up by the past and enable us to escape many dangers as we go forward.

EVALUATION OF THE NATURE–NURTURE CONTROVERSY*

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FOR two years, the controversy concerning the stability of the IQ has assumed first rank among educational disputes. It has been attended by an unusual amount of fervor and feeling, and the ill-will and rancor have not been confined to either side. The issues in this controversy were cast in bold relief by widely publicized data from the State University of Iowa. Because of the dramatic nature of these disclosures they awakened old interests and rekindled fires which had been smoldering since the early 'twenties when W. C. Bagley's brilliant essays challenged the bases of the extreme hereditarian position.

Three monographs published in 1938–39 illustrate certain premises advanced by the Iowa group which have elicited an uninterrupted flow of critical comment.

PRESCHOOL ATTENDANCE AND IQ CHANGE

The first dealt with the influence of attendance in preschool centers upon intelligence-test results. Wellman claimed large changes in scores.[1] This claim was attacked by B. R. Simpson. H. McNemar, reworking the original data, also challenged the conclusions.[2] It is difficult to appraise these reports without access to the original data. However, the writer tends to agree with Burks's statement to be found in a most unbiased review; the question of the effect of attendance in preschool on IQ seems not to be answered with any finality

[8] "March of Education." Washington: U. S. Office of Education, December, 1940.

* Prepared for the meeting of the American Association of Teachers Colleges, Atlantic City, February 21, 1941.

[1] B. Wellman, *University of Iowa Studies in Child Welfare*, 15: 3, 1938.

[2] This material is reviewed in the *Psychological Bulletin*, February, 1940.

by this monograph.[3] He believes that some residual data of importance remain yet to be salvaged from this important work.

Reactions to this study afford an excellent example of what happens to intelligence when emotions are involved. The controversy centered at first in the validity of the Merrill-Palmer scale, which was alleged to yield particularly unreliable measures for young children. However, a curious contradiction appeared: when the test was used by Wellman, the study "can be dismissed," said one critic. When the same test was employed by other investigators, whose conclusions were approved, it apparently became acceptable in making certain comparisons. In another paper, we were admonished by a Minnesota investigator, to be skeptical of the Iowa data because testing at the early age levels "is an art in which there are many essential variations."[4] Testing climates are apparently favorable in Minnesota but unfavorable in Iowa! These incidents show that psychologists themselves are not uninclined to practice wish-fulfillment and wish-projection as compensatory mechanisms.

These digressions doubtless are manifestations of common human frailties. There are, however, more serious practices. For example, in a monograph on intelligence, which the writer edited, the following statement appeared:

> Eight of the nine [child development centers] show no effect whatever upon child intelligence as a result of nursery-school experience. . . .[4]

Since this charge was based upon then unpublished materials which later appeared in the 39th *Yearbook*, NSSE, the writer attempted to verify it. The statement did not seem strictly accurate since gains were reported in several published studies. A small but statistically significant gain was reported by workers from Utah, by Starkweather and Roberts, in Michigan, and by the Iowa workers. In the last-named group, the initial gain seemed "genuine." On the other hand, several other studies showed no difference when control groups were employed, and in others the very small gains could not be considered significant. However, the gains, small in some instances and large in others, support a data trend in the total number of cases which no careful scientist would be inclined ordinarily to overlook.[5] Moreover, they suggest a field for unbiased, critical research which may prove very significant since the number and selection of cases are too inadequate to permit generalizations at this time.

IQ Changes—in Orphan Children and Other Groups

The second type of study which disclosed large changes in IQ for orphans and other underprivileged groups[6] has been disquieting to many persons who have assumed the unassailability of the following statements offered prospective teachers for a decade or more to substantiate the IQ dogma:

> The maximal contribution of the best home environment to intelligence is about 20 IQ points, or less, and almost surely lies between 10 and 30 points. Conversely, the least cultured, least stimulating kind of American home environment may depress the IQ as much as 20 IQ points. But situations as extreme as these occur only once or twice in a thousand times in American communities.[7]

The foregoing statements have been rather generally used to document an emphasis upon the inheritance of mental ability and to give support to the validity of extreme claims such as the following which have appeared repeatedly in educational literature of the past two decades:

[3] B. S. Burks, (Review) *Jour. of Abnormal and Social Psychology*, 35: 3, pp. 457–462.

[4] F. L. Goodenough, *Educational Method*, November, 1939.

[5] G. D. Stoddard, SCHOOL AND SOCIETY, 51: 529–536, April 27, 1940.

[6] H. M. Skeels, *et al.*, *University of Iowa Studies in Child Welfare*, 15: 4, 1938.

[7] B. S. Burks, 27th *Yearbook*, NSSE, Part I, 1928, p. 309.

We can only say that the IQ is certainly constant within narrow margins.[8]

Psychologists no longer doubt that it is now possible to predict, when a child is six years old, what his relative position will be in the total range of intellects when he is sixteen.[9]

Reflections of these statements may be found in many books for teachers; in fact, they seem to be accepted by the authors of several books bearing 1939 and 1940 copyrights.

Again and again, it has been shown that changes of large magnitude occur much more frequently than one would assume from the preceding quotations. For example, in the 39th *Yearbook*, NSSE, R. L. Thorndike reports one study containing IQ retests after an interval of at least two and one half years for over 1,100 children in three New York City schools. "On the whole, instead of a shift of 20 or more points once or twice in a thousand times we find it occurring in 16 per cent. of the cases," says Stoddard.[10] Large shifts have been reported repeatedly in other studies; moreover, they have been found at all levels, including college, wherein, to quote R. L. Thorndike again: ". . . these studies have agreed in finding that those students who remain through a college course tend to gain in intelligence-test score."[11] In addition, it has been pointed out that the interval between test and retest influences the accuracy of prediction. Thus, Brown retested one group with intervals of two and five or more years. The correlation between initial test and first retest was +.86; between the initial and second retest, it was +.61.[11]

All these data give unequivocal support to the conclusion of another careful investigator:

The fact that rates of growth in mental abilities are variable is now well established by the studies of various investigators. In addition to the studies on [our group] there are such studies as Honzik's covering the ages 21 to 72 months; Freeman and Flory's, for ages 8 through 17 years; and Wellman's, from preschool to college.[12]

The foregoing observation concerning the variability of the IQ is based upon the data for groups as well as upon careful case-studies.[13]

Bayley's study, by every criterion one of the most careful investigations in this field, should be read by all students of education. The following excerpts contain some of the important conclusions:

The study of the mental tests during the first three years showed, in brief, that the available tests of intelligence for infants and young children can not be used for the purpose of predicting later ability. It appeared from the study that infants are variable in their rates of growth, and hence do not maintain the same relative position except over short intervals of time. An analysis of the data brought the further conclusion that:

. . . The longer the time interval between any two tests, the lower the correlation. There is, however, a tendency for scores to become more consistent as the children grow older. . . .

There was no evidence for a general factor of intelligence during the first 3 years, but the findings indicate, instead, a series of developing functions, or groups of functions, each growing out of, but not necessarily correlated with, previously matured behavior patterns. . . .

The scores they [these same children] made from 4 to 9 years of age should serve, in part at least, to test the validity of the conclusions just quoted. From 3 through 5 years of age the mental-testing schedule consisted of the California Preschool Scale administered every six months. This is the same test series on which the children had been tested since they were 18 months old. At 6 and at 7 years they were given the Stanford-Binet, and at 8 and 9 years Form L of the new revision of the Stanford-Binet.[14]

The IQ changes evidenced by these children are of particular interest because the children have all

[8] L. S. Hollingworth, "Gifted Children," p. 156. New York: Macmillan, 1926.

[9] L. S. Hollingworth, *ibid.*, p. 158.

[10] G. D. Stoddard, *op. cit.*, p. 531.

[11] R. L. Thorndike, *Psychological Bulletin*, March, 1940, pp. 168, 170.

[12] N. Bayley, 39th *Yearbook*, NSSE, Part II, p. 77.

[13] N. Bayley, *op. cit.*, p. 11.

[14] N. Bayley, 39th *Yearbook* NSSE, Part II, pp. 12–13.

had a high degree of testing experience under relatively constant conditions. Because such experiences should reduce spurious variations to a minimum, smaller than usual IQ changes might be expected. Actually, the changes seem, in many respects, to be similar to those of other studies. . . . *a fourth of the group change 10 or more IQ points on retests made one year after the initial test; while an equal number change 17 or more IQ points over a three-year interval.* (Italics not in original.) . . . Although approximately as many children lost as gained on the second and third tests after intervals of one year, more children gained on the fourth test, and over the longer intervals. Familiarity with the tests has evidently kept some children from falling behind in their scores as far as they might have on a first test, and has perhaps been operative in bringing about a larger proportion of gains in IQ. When the amount of change in IQ from one test to a later one is plotted against IQ at the first test, the scatters show no significant relation between the IQ and stability of scores.[15]

Large shifts in IQ, long established and verified by these very meticulous recent studies, should lead the open-minded to anticipate even greater alterations when *cultural* changes are pronounced. And that is precisely what seems to occur: In the mountain children studied by Asher, Sherman and others; in the Gypsy groups in Gordon's reports; and finally in certain children placed in foster homes.

Studies of Foster Children

This consideration brings us to the third issue and the third type of study which reveals a marked alteration in the IQ's of children in foster homes![16] One surprising result of these studies is the frequency with which high average IQ's have been obtained. Leahy, for example, gives data for a group of children, ages five to fourteen, all of whom were adopted before they were six months of age.[17] The mean IQ is 110.5. Skeels cites an average IQ of 115.4 for 147 children adopted before they were six months of age.[18] Forty-one received IQ's of 120 or above.

Skodak's analysis supports these findings.[19] For 80 of the true mothers of certain foster children, mental-test results were available. The average IQ of this group was 87.7. The majority of the mothers fell "below average": 53.8 per cent. had IQ's below 90; 16.3 per cent. were borderline; and 13.8 were feeble-minded. Yet the average IQ of the foster children was 116. It appears impossible to account for this finding in terms of "selective placement."[20]

The superiority in the IQ's of foster children is indeed noteworthy; it suggests the operation of a number of related forces under circumstances that may be analyzed profitably. In attempting to account for these findings, one should recall that the foster children were adopted in infancy and that their early, most formative years were spent in homes in which their foster parents *may* have been more zealous than typical parents to provide the best environment possible for the sturdy growth and development of the children whom they truly "wanted." It is certainly justifiable to assume that affection, love and concern, generously but judiciously bestowed on growing children, have very desirable effects upon wholesome nurture. Perhaps, then, the "climate" of the home is one important contributor to the children's superior status.

From these considerations, it would be logical to infer that especially poor environments would retard development. And this seems precisely the result obtained in comparisons of younger and older children in

[15] N. Bayley, *op. cit.*, pp. 18 and 20.

[16] M. Skodak, *University of Iowa Studies in Child Welfare*, 16: 1, 1939.

[17] Alice M. Leahy, *Genetic Psychology Monographs*, 17: 236–308, 1935; *Pedagogical Seminary and Journal of Genetic Psychology*, 41: 294–329, 1932.

[18] Harold M. Skeels, *Journal of Consulting Psychology*, 2: 33–43, 1938.

[19] Marie Skodak, *op. cit.*

[20] Burks's criticism of McNemar should be examined. *Op. cit.*, p. 458.

several impoverished environments. Asher's study of Kentucky mountain children (1935), Sherman and Key's of isolated mountain children (1932) and Wheeler's account of East Tennessee children add corroborative evidence to the earlier studies of canal-boat, Gypsy and other sibling groups.[21]

Suggestions Concerning Atmospheres for Growth

About a year ago, the writer indicated the frequency with which high IQ's had been reported among foster children and suggested that one possible explanation for this finding might inhere in the affection, concern and attention displayed by foster parents who "wanted" children sufficiently to adopt them.

It was urged, furthermore, that teachers assume responsibility for dealing with the emotions, the attitudes and values of boys and girls. To all but the most callous or dogmatic, this responsibility will at once be recognized and accepted. However, the typical teacher has been brought up on a psychological diet which has regarded the emotions in a very different light. Emotional patterns have been presented as if they operated apart from intelligence and scholarship. Moreover, the school's emphasis upon intellectual acquisitions—without reference to feeling or attitude—has tended also to make teachers indifferent to the satisfactions which pupils derive in school. And the attitude has been strengthened by educators who insist that intelligence is largely innate, fixed and immutable.

The experimental justification for this position has been largely dispelled. For example, investigators have recently reported that babies who receive affectionate and loving treatment develop personalities more stable than those denied this attention. Several rather significant experiments from university laboratories confirm these findings and show that children develop best in atmospheres permeated with affection, concern and love. What the child needs for sturdy growth is the counsel, affection and love of his associates at every level of development.

It seems, then, that the intelligence test can not fairly be said to be measuring "inborn" intelligence, for its results are highly modifiable at every age level. Moreover, as the interval between the testings grows, the unreliability of the scores increases. Accordingly, the IQ from an intelligence test appears almost useless, as has been pointed out, for individual diagnosis and prediction. These facts stand in striking contrast to the ordinary text-book treatment of intelligence tests and seem to place a heavy responsibility upon the person charged with the training of teachers.

Responsibilities in the Training of Teachers

The time seems at hand when teacher-training institutions should ask certain questions; *e.g.*, should prospective teachers generally be encouraged to give tests with a view to using them in classrooms? It seems that such a practice is almost wholly without foundation or justification. The writer agrees at this point with George Stoddard, who concludes:

> . . . mental testing as a standard procedure should be allowed to decline. . . . It may be better, on the whole, to turn to measures of special abilities, relying, for insight as to general ability, on cumulative records of scholastic achievement. This plan would avoid the bad error of labeling a child as permanently dull, average or bright. Mental tests would be reserved for research and clinical purposes.[22]

But our responsibilities in teacher-training institutions extend further. We have

[21] For an excellent summary, see the *Psychological Bulletin*, March, 1940; and C. L. Nemzek, *Psychological Bulletin*, 30: 143–167, 1933.

[22] G. D. Stoddard, School and Society, *op. cit.*, p. 536.

larger duties: to prevent or eliminate the misconceptions that have grown up with mental testing. We should deal squarely with the concept of homogeneous grouping. There can be little justification for "homogeneous" grouping of children on the basis of test ratings, since scientific studies reveal the essential variability within the human organism and since there has been no evidence advanced to show the validity of any mental test in effecting homogeneity. Moreover, homogeneous grouping violates the basic premises on which democratic life depends: it conceals and minimizes differences arising from exchange of opinion and interpretation; it encourages the development of a "class" education; it rewards or puts a premium upon the fortunate social heritage and penalizes the less fortunate; and it fails to envisage the potentiality of the masses for creative expression and intelligent behavior. It fails, therefore, to recognize the very essence of democratic doctrine and faith.

We should lead students to evaluate clearly the claims concerning leadership or genius and high IQ. For it is abundantly clear that an extraordinarily high IQ in childhood is not an indicator of later attainment that may be regarded as highly or significantly creative; nor do the most remarkable test ratings in childhood warrant expectancies of adult performance that may be characterized as the work of genius.[23]

If by gifted children we mean those youngsters who give promise of creativity of a high order, it is doubtful if the typical intelligence test is suitable for use in identifying them. For creativity demands originality, and originality implies successful management, control and organization of new materials or experiences. Intelligence tests contain over-learned materials which, as Rockwell states,[24] call for stable predictable response, not for original creative reaction. It is evident, then, that an acceptable criterion for "giftedness" must be sought primarily outside of provinces covered by the intelligence test. It appears that "giftedness" can be estimated only by observation of a child's behavior. The child whose performance is consistently remarkable in any potentially valuable area might well be considered gifted; he should be given the opportunity that his attainment warrants for nurture and continuous growth, but his development should not be predicted nor his future attainment prescribed, except as increased growth necessitates adaptations and changes.

We have a special responsibility to evaluate the false claims, based on intelligence tests, in other areas. For example, the social importance and cultural significance of "race" differences should not be overlooked. In the words of Wallace:

> For the combating of racism . . . the scientist has a special responsibility. Only he can clean out the falsities which have been masquerading under the name of science in our colleges, our high schools and our public prints. Only he can show how groundless are the claims that one race, one nation or one class has any God-given right to rule.[25]

Finally, our effort should be to develop teachers who are keenly interested in promoting well-rounded growth in every child —teachers who recognize and are able to guide children's emotional development and their attitudes and values. If we are deeply interested in children's needs as they relate to personality orientation, we

[23] *Cf.* 39th *Yearbook*, NSSE, Part I, pp. 67–83. Consult also P. A. Witty, SCHOOL AND SOCIETY, April 20, 1940, pp. 503–508.

[24] John G. Rockwell, *Educational Method*, November, 1939, pp. 80–92.

[25] Henry A. Wallace, former U. S. Secretary of Agriculture, in an address delivered at the World's Fair, New York, October 14, 1939. Quoted by R. Benedict, in "Race: Science and Politics." New York: Modern Age Books, 1940. Students of education would find this clearly written volume a fitting antidote to the dogma of race superiority so frequently advanced in texts on educational psychology.

shall undertake to bring about basic changes in school practice. School administration and supervision will take on new meaning when schools are organized and administered in terms of the needs of all children at various levels of growth and development. Primary interest will center in the child, his development and his growth. Consequently, his basic needs will become the determining factors in the selection and organization of school experiences. Teaching will involve responsibilities now infrequently assumed. And teacher-training institutions should face the question, What are their responsibilities and their opportunities in this entire area?

Events . . .

THE AFT IN DETROIT

THE annual convention of the American Federation of Teachers, meeting in Detroit, August 24–27, refused to seat 131 delegates from the Teachers Union of New York City, the New York College Teachers Union and the Philadelphia Teachers Union, three locals expelled from the federation in June because of alleged Communist sympathies. George S. Counts, professor of education, Teachers College, Columbia University, and president of the federation, said that the ousting of the three locals was the "only way to save our Union."

At the first meeting of the convention, a message from the National Union of Teachers of England and Wales was read by Cyril Cane, British consul in Detroit. The message stated that 96.5 per cent. of England's children of school age are enrolled in school, and that, ". . . far from being full of sick, nerve-racked children, the schools are full of children who are healthy, confident and happy. The standard of physique and health has actually been raised."

Speakers familiar with educational conditions in Nazi-occupied countries were also on the first day's program. According to *The New York Times*, August 25, Otakar Odlozilik quoted a reply of the German commissar to a request that the universities in former Czecho-Slovakia be reopened:

> If England wins the war, you will open your schools yourselves; if Germany wins, an elementary school with five grades will be good enough for you.

Resolutions adopted by the convention asked Congress to establish a permanent program of adult education, urged an expansion of WPA teaching quotas "so that 5,000,000 non-Americans may be speedily inducted into the ranks of loyal American citizens" and condemned the Rapp-Coudert investigating committee of the New York legislature in that its probings into subversive activities in schools and colleges, while "legally and technically correct," nevertheless tended to weaken public confidence in not permitting witnesses the "right of counsel, the right of cross-examination and the right to obtain a transcript."

President Counts, in closing the convention, cautioned those who led the fight to exclude the unions accused of Communistic sympathies not to adopt an attitude of intolerance "even to those who may have followed a totalitarian line in the past. We had our convictions; it must be remembered that they had their convictions, too."

STANFORD UNIVERSITY COMPLETES ITS CYCLE OF HALF A CENTURY

STANFORD UNIVERSITY celebrated its fiftieth anniversary, June 16–21, with a significant program featuring distinguished speakers on topics of import to the nation. Over three hundred delegates from educational institutions and learned societies were present.

A symposium, continuing through June 19, on "The University and the Future of America," to which the public was invited, opened the commemoration week, with Ray Lyman Wilbur, president of the university, presiding. The addresses were as follows: On Monday, June 16, Ernest O. Lawrence, professor of physics, University of California; Aurelia Henry Reinhardt, president, Mills College, and Isaiah Bowman, president, the Johns Hopkins University, spoke respectively, on "The New Frontiers in the Atom," "Women in the Future of American Universities" and "The Twelve Houses of

Heaven." On Tuesday were heard Roscoe Pound, dean emeritus, Law School, Harvard University, on "Education and Social Control through Law"; Lewis Mumford, author, on "The Unified Approach to Knowledge and Life"; Herbert S. Jennings, professor of zoology, University of California at Los Angeles, on "Some Aspects of the Biological Bases of Human Behavior," and Robert A. Millikan, chairman, executive council, California Institute of Technology, on "Three Great Weaknesses in American Education, and Possible Remedies." Also on Tuesday, President and Mrs. Wilbur were hosts at an afternoon reception. On Wednesday, Edwin P. Hubble, Carnegie Institution of Washington, Mount Wilson Observatory, discussed "The Rôle of Science in a Liberal Education"; Walter B. Cannon, professor of physiology, Harvard University, "Problems Confronting Medical Investigators"; Edward L. Thorndike, professor emeritus of educational psychology, Teachers College, Columbia University, "Human Resources." There was a dinner in honor of symposium speakers and a radio address by Charles F. Kettering, vice-president, General Motors Corporation. On Thursday, Archibald MacLeish, librarian of Congress, spoke on "American Writers and the Future"; William F. Ogburn, professor of sociology, University of Chicago, on "The University in the Changing Society of the Future," and Edwin F. Gay, Huntington Library, on "History and Economics in the University of the Future." Herbert Hoover, former President of the United States, spoke in the evening of the same day, and in the afternoon, Edwin P. Hubble, Archibald MacLeish, Roscoe Pound and Ray Lyman Wilbur participated in a forum on "The University of the Future."

The formal academic convocation and commemoration exercises took place on Friday in Memorial Church. A musical program was followed by addresses by Robert Gordon Sproul, president, University of California (whose address will be published in a forthcoming number of SCHOOL AND SOCIETY); Jackson Eli Reynolds, and President Wilbur. In the afternoon, the Hoover Library on War, Revolution, and Peace was dedicated. Charles H. Brown, president, American Library Association, presided at the dedication assembly in Memorial Hall, when Sidney B. Fay, professor of history, Harvard University, and Charles Seymour, president, Yale University, were the speakers. Kamiel Lefévère, carillonneur, Riverside Church, New York, then gave a concert from the Library Tower, after which, at the plaza in front of the Library, the formal dedicatory exercises were held, with Leland W. Cutler, chairman of the board of trustees of the university, presiding. President Wilbur, the Honorable Herbert Hoover, Edgar Rickard, chairman of the building committee, and Ralph H. Lutz made the addresses. In the evening there was a concert by the San Francisco Symphony Orchestra.

On Saturday, June 21, the alumni held a public meeting in Memorial Hall. A portrait of President Wilbur was unveiled. The speech of presentation was made by Mr. Hoover, that of acceptance for the university by Mr. Cutler. President Wilbur replied. A meeting of the assembly delegates closed the week's program.

PROGRESS IN ENGINEERING EDUCATION

A REPRINT from the *Journal of Engineering Education* bearing the title, "Report: Progress in Engineering Education," has been sent to SCHOOL AND SOCIETY by C. F. Scott, chairman of the progress committee of the Society for the Promotion of Engineering Education. It is the committee's sixth annual report and "continues the record of significant trends, developments and events in engineering education."

Attention is called to the annual meeting in Berkeley (Calif.), 1940, at which all addresses and discussions were "animated by a common sentiment and . . . aim, Progress," as was apparent in the issues of *Engineering Education* reporting on the sessions of the convention.

Of the growth of the society, the report states that it now comprises, besides nineteen sections in different parts of the country, seventeen branches in educational institutions, all of which have held significant meetings from time to time.

The Engineering Defense Training Program under the direction of the U. S. Office of Education, the report goes on to say, is, for engineering colleges, "the important event of the year" because the demands upon the technical schools for engineers have revealed "their value to the nation." In meeting these demands, the

colleges have adapted their programs to "particular situations" and have faced the old problem of "excessive wastage of students in the program of training engineers." The committee warns against greater federal control of engineering education and against the possibility of submerging the regular normal four-year program in engineering with the emergency-defense-training courses.

The Engineers' Council for Professional Development, as reported by its committee on engineering schools, has accredited 542 undergraduate engineering curricula in 56 institutions. It is hoped that this activity of the council has resulted in improved standards and facilities in engineering education.

Two major recommendations embodied in a report on the aims and scope of engineering curricula at the Berkeley meeting were: (1) continuation of the present general plan of engineering education of four years of integrated programs at the undergraduate level, followed by post-graduate work, and (2) a "broadened base for these programs so as to include more and better work in the basic sciences and humanities."

A report from the committee on English, sent to engineering teachers, libraries, teachers of English and others, brought the response that the problems under discussion were not different from those confronting undergraduate teachers of English in general.

The cooperation of chemical-engineering educators culminated in the publication of "Applications of Chemical Engineering," edited by Harry McCormack, Illinois Institute of Technology, and "Teaching of Chemical Engineers," a compilation directed by Joseph C. Elgin. The progress committee, in view of the criticism that chemical-engineering departments are not "contributing their share to students in other departments" and that "adequate service courses are not available to chemical engineering students," recommended joint cooperative conferences to consider the problems of fitting the student for "diversified industry with its many problems which have not found their solution in text or hand books." The committee further declared that "Trends in Cooperative Education" (SCHOOL AND SOCIETY, July 3, 1937) is still "fairly descriptive of present practice" and that "methods of dealing with labor problems are archaic." Trends in a decade, as presented to the Los Angeles Section of the American Society of Chemical Engineers, were as follows:

1. Engineering college entrance requirements are being raised.
2. Recent developments in science and technology are being incorporated into engineering curricula.
3. Industrial or trade courses are being dropped from engineering curricula.
4. A desire to give engineering students broader, less technical training is crystallizing.
5. The conviction that engineering curricula must be lengthened is gaining ground.

COMMUNITY LIVING IN THE SHELTERS OF LONDON

PRIME MINISTER WINSTON CHURCHILL, proudly confident that "London can take it again," said in his July 14 address, that in anticipation of the renewal of bombing attacks this fall and winter, the shelters are being made more habitable. Warmed and lighted, provided with educational and recreational facilities, they are being turned into clubs rather than mere refuges from danger above ground. At first in the crisis precipitated by the *Blitzkrieg*, food and a place to sleep were all that could be thought of, but the English love of order soon broadened these pioneer interests into a régime approaching normal living.

The acute need for the strengthening of morale was met by the London County Council and other organizations in courageous efforts to bring programs of study and entertainment into the shelters. People of all ages who had attended the LCC institutes before the war found that they could continue them during the long evenings under ground, and other "shelterers," no doubt including many who had never before been interested in such opportunities, were able to employ their minds in congenial work of many types. The LCC evening institutes had once boasted that, if ten or fifteen people desired it, they could conduct a class in any subject, "whether it was tropical fish or Buddhism." Naturally, neither of these extremes was popular in the shelters, but "variety was never lacking," and new skills were learned with enthusiasm. Film shows, full length, or educational and travel "shorts" always drew a crowd.

The vitality of the democratic principle of government was shown in the establishment, "on the initiative of the shelterers themselves," of a

general committee composed of two representatives, duly elected, from each of the "wards" into which the shelters were divided. The committee met weekly from 10 P.M. to 2 A.M. In the larger shelters, housing from 4,000 to 6,000, discussions were held on topics relating to citizenship and its responsibilities and on the problems of reconstruction after the winning of the war.

Small libraries have played no insignificant part in bolstering morale. The British Institute of Adult Education and the publishers of the "Penguin" books have provided 50,000 volumes, and local LCC institutes have shared in furnishing reading material. Not illogically, when first the necessity of this subterranean existence was forced upon Londoners, the literature of escape was in demand, but "a thirst for facts, especially for facts about the background of the war," soon superseded the longing for ivory towers, and the shelterers, especially the boys and girls, wanted books on practical and technical subjects.

Singing in the shelters, which began with "improvised sing-songs," became programs of merit, which were carried to other shelters on a tour of entertainment. Pantomimes and plays have also been undertaken in the large shelters, ingenuity providing the necessary paraphernalia, including "lighting effects." Christmas and New Year's programs brought out a variety of talent, both musical and histrionic. "Guest artists were invited from the ranks of the fire-fighters, and refugees sang the songs of their mother countries."

While summer lasts, the wardens of the shelters urge their charges to remain in the open air as long as possible, but with the experience of the winter in retrospect and improvement in the shelters in prospect, there is every reason why Mr. Churchill should say: "London will not wince. London can take it again." "Merrie England" is a time-honored phrase that, even in this tragic era, has not lost its meaning.

Query: Is Hitler mad enough to attack such people on their native heath?

Notes *and* News . . .

BEGINNING with the first number of the current volume (July 5), some changes were made in the format of SCHOOL AND SOCIETY, slightly increasing the space available for articles and other features. With the present issue the printing of 32-page numbers, including cover pages, will be inaugurated. This is in part a measure of economy dictated by the rising cost of paper and the probable increase in other costs of publication.

Appointments, Elections, Resignations, Retirements

DOAK SHERIDAN CAMPBELL, dean, Graduate School, the George Peabody College for Teachers (Nashville, Tenn.), has been appointed president, Florida State College for Women (Tallahassee), to succeed Edward Conradi, who is retiring after thirty-two years in the presidency.

BROTHER ALFRED has assumed his duties as principal of Sacred Heart College, San Francisco.

DABNEY S. LANCASTER, executive secretary, Board of Overseers, Sweet Briar (Va.) College, has been appointed state superintendent of public instruction, Virginia. Mr. Lancaster succeeds Sidney B. Hall, whose appointment as professor of educational administration, the George Washington University, was reported in SCHOOL AND SOCIETY, August 23.

D. S. FARMER, superintendent of schools, Logan and Yell counties (Ark.), has been named superintendent, Arkansas Boys Industrial School (Pine Bluff), to succeed J. S. Pollard, who has been acting superintendent since the resignation of W. P. Davis in July.

THE REVEREND JOSEPH F. MACDONNELL, S.J., and the REVEREND JOHN P. HARLAN, S.J., have been appointed to the deanships of philosophy and theology, respectively, Weston College, Boston.

LOGAN WILSON, associate professor of sociology, University of Maryland, has been appointed professor of sociology and head of the department, College of Arts and Sciences, Tulane University.

MARGARET P. GRAFF has been appointed to the staff of the department of psychology, Westminster College, New Wilmington, Pa. She will

also act as director of Browne Hall, the dormitory for freshman women.

RAY A. HEADY, instructor in journalism, University of Kansas, has been appointed assistant professor of journalism, University of Oklahoma.

HOWLAND W. BAILEY, instructor in physics, University of Wyoming, has been appointed assistant professor of physics, University of Oklahoma, to take over the work of Arthur Hemmendinger, who was called to active service by the government, as reported in SCHOOL AND SOCIETY, May 17.

LIONELLO VENTURI, Italian art critic now living in New York City, has been appointed to fill the chair of Italian culture, University of California (Berkeley), during the fall semester. This is the first appointment to the chair since 1931. The chair is supported by the Fund for Italian Culture which was established by Italians of the Bay area.

EVERETT J. KIRCHER, assistant professor of language-arts education, Ohio State University, has been appointed visiting associate professor of education, College of Arts and Sciences, Tulane University, for the academic year 1941–42.

BEATRICE SAWYER ROSSELL will become director of educational service for the Quarrie Corporation, publishers of "The World Book Encyclopedia" and "Childcraft," September 22. Mrs. Rossell is a former editor of the *American Library Association Bulletin*.

A. J. HARGROVE, superintendent of schools, Dublin (Ga.), has been appointed representative, division of vocational rehabilitation, State Department of Education, with headquarters at Savannah.

JULIUS DORSEY, acting superintendent of schools, Dallas (Tex.), has been elected to the superintendency, succeeding the late Norman R. Crozier.

ANNE CARROLL MOORE, for thirty-five years superintendent of work with children in the New York Public Library, has retired. She will be succeeded by Frances Clarke Sayers, a member of the staff of the Graduate School of Librarianship, University of California.

WALTER WOODS, superintendent, State Industrial School for Boys (Topeka, Kans.), will resign, October 1, to accept a position as sales manager for Thatcher, Inc., Topeka.

Recent Deaths

BRIGADIER GENERAL CHARLES H. MITCHELL, recently retired dean of the faculty of applied science and engineering, University of Toronto, who had been a member of the Intelligence Service of Canada during World War I, died, August 26. Dr. Mitchell was appointed to the deanship in 1919. He was sixty-nine years old at the time of his death.

ALBERT EDWIN SMITH, president emeritus, Ohio Northern University (Ada), died, August 26, at the age of eighty years. From 1897 to 1905, Dr. Smith had held pastorates in the Methodist Episcopal church in a number of Ohio towns before going to the university as president in 1905. He became president emeritus in 1930.

SOPHIE SHEPARD HOGAN, founder (1909) of the Hollywood School for Girls (Los Angeles), died, August 27, at the age of seventy-one years.

WILLIAM NEWTON LOGAN, professor of geology (1916–36), Indiana University, died, August 27, at the age of seventy-one years.

CHARLES VETTER, for twenty-five years professor of dental surgery, New York University, died, August 28, at the age of fifty-four years.

DUANE REED STUART, Kennedy professor of Latin languages and literature and chairman of the department of classics, Princeton University, succumbed to a heart attack, August 29. Dr. Stuart served as professor of Latin, Michigan State Normal College (Ypsilanti), 1899–1900; as instructor in Latin (1900–01), instructor in Greek (1902–04) and assistant professor (1905), University of Michigan. In 1905, he went to Princeton University as preceptor in classics and became professor in 1907. During 1924–25, he was Sather professor of classical literature, University of California. He had also served as visiting lecturer at Bryn Mawr (Pa.) College (1927–28) and at Yale University, 1931. Dr. Stuart was in his sixty-fourth year at the time of his death.

IRVING HUSTED BERG, dean, College of Arts and Pure Science, New York University, and chaplain of the university, died, August 29, in

his sixty-fourth year. From 1902 to 1936, when he became dean of the college, Dr. Berg had served a number of pastorates in the Congregational church, the last of which was the Fort Washington Collegiate Reformed Church (New York City), 1917–36.

DANIEL DANA JACKSON, professor of chemical engineering and head of the department, Columbia University, died, September 1. Dr. Jackson, who was seventy-one years old at the time of his death, began his work in 1893 as a chemist in the Boston water works. In 1895 he became biologist for the Massachusetts State Board of Health and lecturer at the Massachusetts Institute of Technology. From 1897 until 1912, he served the City of New York in a number of administrative positions. In 1911 he joined the staff of Columbia University as lecturer on sanitary engineering and bacteriology; he served as assistant professor of chemical engineering (1913–17), as associate professor (1917–18) and as professor and head of the department since 1918.

JESSE HOMER NEWLON, professor of education, Teachers College, Columbia University, succumbed to a heart attack, September 1, at his summer home, New Hope, Pa. Before going to Teachers College in 1927, Dr. Newlon had been superintendent of schools (1926–27), Denver (Colo.), and superintendent of schools (1917–20), Lincoln, Nebr. From 1927 to 1937, he was director of the Lincoln School of Teachers College. In 1924–25, he served as president of the NEA. He was the author of several books, including "Educational Administration as Social Policy" and "Education for Democracy in Our Time," and was associate editor of *The School Executive*. Dr. Newlon was fifty-nine years of age at the time of his death.

Coming Events

THE State Teachers College (Kutztown, Pa.) will celebrate the seventy-fifth anniversary of its founding, September 13, 14 and 15. The Honorable Francis B. Haas, state superintendent of public instruction, will give the principal address on the morning of September 15, when the Nathan C. Schaeffer Auditorium will be dedicated. Henry Klonower, state director of teacher education, will speak at the luncheon meeting on the same day.

THE American Committee for Protection of Foreign Born is sponsoring a national "Americans All" Week, October 21–28, which will culminate on the latter date in a "nation-wide observance of the 55th anniversary of the dedication of the Statue of Liberty on October 28, 1886." The committee aims to counteract "certain efforts now being made to undermine democracy in our country by fostering discrimination and hysteria against Americans of foreign birth, who are an integral part of the population and can not be set apart for special treatment without endangering the rights and welfare of all Americans, native and foreign born. . . ."

Other Items of Interest

COLLINS HEALY, professor of Irish studies, Fordham University, has announced to the press that the popularity of courses in Irish culture has been so marked during the past twenty years that the university now ranks as the center of Celtic culture in the United States. Not only does Fordham University provide the largest number of courses in Irish subjects—forty-two and a seminar—but it also has employed "seventeen more teachers in Irish subjects . . . than any other American school" during the past score of years. In addition, the registration in these studies exceeds that of any other college or university in the country. Over 2,000 registrations are reported from 1922 to date. June 22 marked the ninth American revival of the ancient *Feis of Tara*.

To meet the emergency demands of defense-education work throughout the state, the Pennsylvania State College has put a chemistry laboratory on wheels—"the first mobile unit to be used in engineering-defense training." The equipment is housed in a two-ton truck and will travel approximately 10,000 miles to 98 class centers where high-school graduates are being trained by the college for technical jobs in defense industries. More than three dozen experiments can be demonstrated in the mobile laboratory. Two demonstrators and one technician will travel with the unit. The demonstrators are R. D. Billinger and Lester Kieft, of the college extension faculty. Harry Lentz, of the Franklin Institute (Philadelphia), from which the equipment has been leased, is the technician.

ACCORDING to a release from the U. S. War Department, the reading tastes of men in the Army run from highly technical books to modern poetry. Librarians in the various camps throughout the country say that books of poetry are in constant circulation. This trend is most marked in the East; in the Southwest and West, the demand is for western sagas and romances, while in the South the troops "can not get their hands on enough technical books and materials." Among the men from New York City and vicinity, the best sellers, plays and poetry are most frequently called for. There are some 500 libraries in operation throughout continental United States and outlying bases, and librarians keep records of the soldiers' preferences. Requested books are added to the library facilities.

AT the exercises dedicating a camp sponsored by the Catskill (N. Y.) school board, the first enterprise of the kind to be undertaken in the state, N. L. Engelhardt, associate director, Advanced School of Education, Teachers College, Columbia University, commended the school-camp project as a means for contributing to "the effectiveness of the upbuilding of the youth of America." Clifford L. Brownell, head of the department of health and physical education, Teachers College, said that a well-organized school camp might properly be called "democracy at work." The Catskill project is regarded by its sponsors as a defense measure.

IT is reported that new ROTC naval units are to be organized this fall in the following institutions: University of Notre Dame (South Bend, Ind.); University of Colorado (Boulder); Duke University (Durham, N. C.); Holy Cross College (Worcester, Mass.); University of New Mexico (Albuquerque); Rensselaer Polytechnic Institute (Troy, N. Y.); Rice Institute (Houston, Tex.), and Tufts College, Medford, Mass. Those who enroll will study seamanship, gunnery and administration, and if successful in completing the course will be commissioned as ensigns in the Naval Reserves.

AN Associated Press report from Atlanta, August 22, quotes Governor Eugene Talmadge as saying that "there ain't no danger" that colleges in Georgia's State University will lose their accredited rating as a result of the recent summary dismissals. If, however, accrediting should be withdrawn, the governor is said to have added, it would save Georgia money, because the salaries of professors would be cut in half.

ESTABLISHMENT of four fellowships by which four young men of other American republics will be provided fees, maintenance and transportation from and to home, have been announced by Louisiana State University. The fellowships were established through the cooperation of three transportation companies, Pan-American Airways, Delta Line of New Orleans and a third, which requested that its name be withheld. Plans for the fellowships were worked out last year.

Shorter Papers . . .

THE INNER WORKING OF THE NSSE[1]

THIS article describes the *raison d'être*, mode of election and chief functions of the Board of Directors of the National Society for the Study of Education. The description, it is thought, will be found of interest, not only to the members of the society, but also to the members of other organizations whose officials have written frequently for information about the society's evidently unique system of administrative control, under which it has sponsored and published a large number of notable studies (seventy-nine yearbooks, to be exact), generally recognized as of outstanding educational significance.

The National Society for the Study of Education traces its beginnings, and to some extent its aims and traditions, to the Herbart Society for the Scientific Study of Teaching, organized in 1895, partly to advance the status of scientific education and partly to assemble and to focus the energies of a small group of the younger American educators of the day.[2] Debate on the Society's name continued until 1909.[3]

[1] This article was prepared by Dr. Guy M. Whipple shortly before his untimely death, August 1, 1941.

[2] On the "Executive Council" that held office for the five years from 1895 to 1899 were Charles DeGarmo, Nicholas Murray Butler, John Dewey, Levi Seeley, C. C. VanLiew, Frank McMurry, Charles McMurry, Wilbur Jackman and Elmer E. Brown.

In the Herbart Society and in the subsequent organization, membership was restricted to a small group of educational leaders, who were to write monographs for discussion at regular general meetings and also at more informal round-tables held at various places. The topics under discussion during the first three or four years concerned aspects of Herbartianism. Subsequently, there appeared a gradual broadening to include educational situations and doctrines outside the domain of Herbartianism. Still the stress remained upon serious and patient study by all active members, whose reports of methods they were following and results they were obtaining were to receive the benefit of professional criticism by their fellow-members, with the intent ultimately to issue, on a non-commercial basis, a series of monographs (the yearbooks) aimed at embodying the conditions, laws, processes, and guiding principles underlying the science and art of education.[4]

As the society grew in membership and as attendance at its meetings increased, the methods of its work had perforce to change. Manfred J. Holmes, secretary in 1906, said, somewhat sadly, "It is yet to be seen whether a Society with such standards and purposes can be maintained by the teaching profession"; and again, "We doubt whether we could now call upon all of our more than seven hundred active members for reports on the problems they are 'seriously and patiently at work upon'"; and yet again, "It might be questioned whether many of our recent meetings have featured that 'close and careful discussion' that was one of the cardinal aims of the earlier days . . . when a small group of skilled and earnest men assembled for spirited debate upon the issues raised in the more compact fifty-page yearbooks of those days."

If Dr. Holmes felt difficulty under those conditions, what might he feel now, when the society numbers some twelve hundred members, presents its programs to audiences of as many as fifteen hundred persons (many of them non-members who are confessedly attracted in part by the hope of enjoying some "snappy come-backs"), and publishes yearbooks that may contain 800 pages and command commercial sales that run into the thousands (30,000 copies in the case of our "best seller")![5]

This evolution in type and activity of the organization became reflected in the radical revision of the society's constitution in 1924, under the leadership of Charles H. Judd, then its president, whereby the time-honored offices of president, vice-president, executive committee, and board of trustees were replaced by a Board of Directors, operating under a chairman elected by the board. A number of specific considerations underlay this revision. It was felt that in this society, as in most educational organizations, the election of the president and his official colleagues had become a perfunctory matter; that the function of these officials had become mainly limited to posing as figureheads at the annual meetings; that there was always the danger of perpetuating an inner clique; that officers elected annually were likely not to be sufficiently conversant with the policies of the society; that a more serious and business-like administrative control was needed for a society that had really become a professionally important publishing organization. The feature characteristic of good business management that seemed most important was to intrust the management of the society to a board of directors—specifically, to a group

[3] The name commonly used to designate the pioneer group was "The National Herbart Society," although the name cited above was used in more accurate accounts. The second name of the earlier organization was "The National Herbart Society for the Scientific Study of Education," which was continued until its last year of existence in 1899. In 1900 there is no record of any activity. In 1901 reorganization was effected as "The National Society for the Scientific Study of Education." In 1905 a committee on renaming the Society recommended "The National Society of Education." The same committee advocated that designation again in 1906, but by some curious turn of affairs, the members voted overwhelmingly in favor of "The Herbart Society," with the proviso that the executive committee might use its discretion to insert "National" or "American" before "Herbart." Because, by accident, the motion was not offered as an amendment to the constitution, the executive committee refused to act, and the matter seems to have passed over until 1910, when a revised constitution was adopted in which the term "Scientific" was dropped and the society thus took on the name under which it has operated ever since.

[4] See the *Fourth Yearbook*, Part II, pp. 68–70, for a list of the problems on which the active members were at work.

[5] As early as 1905 the society's meeting attracted so many that it was suggested that thereafter "admission should be by personal identification" or "non-members granted the floor only upon invitation."

of six persons whose tenure of office should be extended to three years or more, but subject to rotation, and whose election by the members of the society should be so carried out as to guarantee democratic representation and freedom from domination by a self-perpetuating ring. The nature of the machinery set up to obtain this management is described in the printed constitution of the society included in the back matter of Part II of any yearbook. Explanatory comments on the machinery of the election and organization of the board will help to make clear why it takes the form that it does.

(1) Nominations to the board of directors are made from a list of some 125 persons. This list is composed of every member who has contributed a signed article to any yearbook of the society and who is in good standing at the time of election. The printed list (primary ballot), with the name, position and address of all such persons placed in alphabetical order, is mailed to every member of the society in October, with the request that two members be placed in nomination by mail vote. Attention may be called to one restriction in particular in the listing of potential nominees; namely, that of contributing to a yearbook. This restriction is made because (*a*) the field of potential nominees would otherwise be too extensive (the society has some 1,200 members); (*b*) there is annually considerable shifting of membership (perhaps a hundred members who drop out and an equal number of persons who enroll); (*c*) contributors to the yearbooks constitute a relatively stable group, familiar with the society's enterprises, and, moreover, there are enough of them to guarantee representation on the board of any or all professional types that the members at large may desire to put in charge of the society's affairs. Experience shows, for example, that even if so few members as twenty-five check a given name, that name will appear on the final ballot.

(2) The six persons who receive the highest number of votes in the primary ballot just described are next asked by the secretary whether they accept the nomination and are prepared and willing to serve if elected. Membership on the board has always been regarded as a distinct professional honor, but it is by no means a purely decorative reward of merit, for it entails, at the least, several days of painstaking work annually.

(3) The six persons who accept nomination are listed in a final (or electing) ballot, mailed to every member of the society in November with instructions to vote for two nominees. By order of the board, it may be noted, the following statement appears on both ballots:

> The Board of Directors suggests that, in making their selection of candidates, members take into consideration the desirability of a personnel that shall represent different localities, institutions, types of positions, and schools of thought.

(4) Each director is elected for a term of three years, and the terms of two directors expire annually. This arrangement guarantees that the majority of the board is always familiar with the society's undertakings, and it insures the continuity of general policy so essential to efficient administration, yet permits the injection of new ideas equally essential to it. The board appoints the secretary-treasurer, who becomes the seventh member of the board, and who, in the nature of the case (the present secretary is serving his twenty-sixth year in that capacity), operates as another agency for securing continuity of policy and for promoting the general efficiency of the organization.

(5) Each director is elected for a term of three years, is eligible for reelection for another term, and commonly is thus reelected. Although no member of the society had ever raised the obvious point that, by a little adroit electioneering, the board might become a self-perpetuating body, the board, itself, one day saw this threat to the democratic spirit it was striving to inject into the affairs of the society and resolved forthwith to enunciate a "no-third-term" policy. To that end, it went to some pains to embody the principle in the constitution of the society that now reads: "No member who . . . has been elected for two full terms in immediate succession shall be eligible to reelection to succeed himself for a third term."

It may be added that the board selects its own chairman to serve one year, and the democratic spirit has become operative inside the board, in that provision has recently been made such that each member shall have the honor of serving as chairman during some year of his incumbency.

The foregoing account will serve to explain why this society has a board of directors instead of the usual set of officials, and how and why the board is organized and chosen as it is.

The remainder of this article will present a general description of the board's work.[6]

In the earlier days of the society, the topics treated in the yearbooks appear to have been chosen by the relatively small group of members, all of whom participated directly or indirectly in the development of the topic into a printed yearbook. Later, after membership had become less restricted, there was a period when most of the yearbook topics were chosen in a more or less opportunistic manner from a variety of sources—doctorate theses, for instance, or the reports of committees, like the reports of the Committee on Minimal Essentials and on Economy of Time in Education; in a third period, the board originated nearly all the yearbooks upon topics that arose in its own discussions; finally, within the past few years, the board has actively solicited topics from its members and has had developed a special printed form upon which a proposal for a yearbook may be submitted.

Topics proposed during these third and fourth periods have been examined by the board with particular care. Those agreed upon have been chosen not only on account of their educational timeliness but also on account of the availability of adequate research investigation. In short, the effort is made to get at demonstrated facts rather than to elicit opinions. Yearbooks of this sort naturally lend themselves to preparation by a carefully selected committee of the society. The method by which these committees are set up and carry forward their work demands brief explanation. The typical procedure involves the following steps:

(1) A preliminary survey, for which about $200 is made available, is arranged in order to determine the feasibility of the proposal, to list possible contributors, and to formulate a tentative outline.

(2) If the outcome of this survey is favorable, and the society seems a good agency to undertake the enterprise, the board appoints a yearbook committee chairman and, in conference with him, appoints a committee numbering five to eight persons who are selected with much thought to secure (*a*) adequate representation of regions, institutions and schools of thought, (*b*) professional competence to deal with the subject and (*c*) likelihood of willing cooperation.

(3) An appropriation is made (in bulk or annually, and sometimes supplemented by subvention by other organizations) to cover the cost of committee meetings and clerical assistance. These appropriations, which are made possible by income from commercial sales of earlier yearbooks, average about $1,200 for each part of a two-part yearbook.

(4) From time to time each chairman submits an oral or a written report of progress on the book in his charge.

(5) The board gives more than perfunctory attention to these reports. Special insistence is made that all sides of controversial issues shall be clearly and sympathetically set forth. If the committee can not harmonize the issues by discussion within its meetings, it is urged so to present them in the yearbook that the reader can appreciate the nature of all such individual differences of interpretation and opinion and the reasons why they are held.

(6) Without formal approval by the board, the chairman of the official committee is permitted to secure the services of other persons (known as "committee associates") as contributors and advisers. As many as thirty or forty associates have assisted in this way in the preparation of some of the yearbooks.

(7) The publication schedule for each yearbook follows prescribed limitations of space and time. Likewise, the society's publication program is definitely laid out for several years in advance. From one to three years are devoted to the preparation of each committee's manuscript.

(8) The responsibilities of the board and of the yearbook editor are prominently displayed in the front matter of every volume. Note in this connection the final paragraph of the statement:

> Neither the Board of Directors, nor the Yearbook Editor, nor the Society is responsible for the conclusions reached or the opinions expressed by the Society's yearbook committees.

Naturally the account just given of the work done by the board of directors in connection with

[6] For the details, see the "Synopsis of the Proceedings of the Board of Directors" in the back matter of the second part of any yearbook. Incidentally, it may be noted that this synopsis is one more device adopted by the board to keep members of the society fully conversant with the work of their administrative officials. In the back matter also appears a classified account of the receipts and expenditures of the treasurer.

the society's yearbooks is not exhaustive. A considerable effort, for instance, is expended, after conferences with the committee chairman, in laying out the program of the annual meeting of the society.

Again, the board maintains relations and delegates representatives in connection with several professional councils and commissions, and often holds joint sessions with other organizations. All such activities are matters of careful concern on the part of the board.

It is hoped that this summarizing outline of the inner working of the National Society for the Study of Education will demonstrate the extent to which the society has gone to secure democratic administration of a professional organization. The society's yearbooks, taken in conjunction with its annual meetings, will demonstrate the degree of efficiency thereby achieved.

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Research . . .

EVIDENCES OF AN UNDERLYING PHILOSOPHY IN GRADUATE SCHOOLS OF EDUCATION[1]

IT has been estimated that each year an average of 25 per cent. of all graduate students enrolled in the United States receive degrees. In the period, 1935–39, there were awarded by the universities and colleges of the United States a total of 13,443 Ph.D. degrees.[2] The number of M.A. degrees awarded increased from 18,243 in 1936 to 22,631 in 1938.[3] (These figures include the M.S., as well as the M.Ed.) In our southern universities alone,[4] 10,208 degrees were granted in the four years from 1935 to 1939. Of this number, 9,285 were Master's degrees, and 923 were Ph.D. degrees.

It is probably easier to stimulate graduate enrolments in education than in any other department. For example, the mere passing of a law requiring Master's degrees for all teachers would greatly augment the graduate enrolments in our schools of education. Such means may, however, only create an artificial interest in graduate work as such. This makes it all the more urgent that faculties in schools of education think clearly about the problems involved in their fields. When the incentive for doing graduate work is so strong that students with undesirable personalities and inferior mentalities wish to enroll, the problem of admittance to graduate work becomes crucial.

In attempting to find what evidences there are that graduate schools do have an underlying philosophy, I endeavored to find out through a questionnaire study what the deans of the schools of education think about certain problems in their graduate work. The questionnaire was sent to 54 deans, including the deans of almost all our state universities and a few private schools. Forty-three of the 54 replied to the request.

Since it seemed to me that, in a study of graduate work, one of the first problems we should concern ourselves with was that of admittance to the graduate schools, I attempted to find out what the practice was in this regard. The question asked was, "Is admission to your graduate school for a degree based solely on credentials of graduation from a standard college? If you have other requirements for admission, what are they?"

Fifteen of the 43 deans answering this question stated that credentials from a standard college were all that was necessary to be admitted to their graduate schools. Of the remaining 28, various prerequisites were mentioned. Nine mentioned the fact that the undergraduate work had to show a certain scholastic standing, while 10 pointed out that they had a prerequisite requirement of courses in education on the undergraduate level. In most cases where this was mentioned, the hours specified were from 12 to

[1] Read before the National Association of Colleges and Departments of Education, Atlantic City, N. J., Feb. 23.

[2] Based on data received from the U. S. Office of Education.

[3] *Ibid.*

[4] Charles W. Pipkin, "Some Phases of Graduate Work in the Southern Regions Since 1935." A paper presented before the Conference of Deans of Southern Graduate Schools, Memphis, Tenn., October 23–24, 1940.

15. Two mentioned aptitude tests; three mentioned mental tests; and four mentioned personality ratings, as prerequisites for admittance to the graduate work. Two universities have a special committee that passes on the candidate's ability. Five or six universities do not admit students as candidates for degrees until after they have done a certain amount of graduate work, and some of them say that the candidate's purpose in wanting a degree is considered. The sum total of the replies to this question indicates rather strongly that the deans of our schools of education are attempting to set up more specific prerequisites for admittance to graduate work than just that of graduation from a standard college. This, I think, is a wholesome attitude, because the more incentive there is to do graduate work, the more it is probable that many applicants who are not qualified will be attempting to do it.

The second question was this: "Relative to degrees for majors in education, list those which your university offers, list the degrees for which a reading knowledge of a foreign language is required, and list the degrees for which a thesis or some type of research is required."

Seven different kinds of degrees were mentioned as given to students majoring in education. These degrees with the number of universities giving each are as follows:

Title of degree	Number of universities offering the degree
M.A.	35
Ph.D	31
Ed.D.	19
M.Ed.	18
M.S.	12
M.S. in Ed.	9
M.S. in Com. Ed.	1

Thirty universities require a reading knowledge of one or more foreign languages for the Ph.D. degree. Four require it for the Ed.D. degree, five require it for the M.A. degree, and in two or three other universities, it *may* be required for the Master of Education degree or the Doctor of Education degree. Consequently it would seem that other than for the Ph.D. degree the modern-language requirement is not very general. It is interesting to note here that, of the 35 universities who give a Master of Arts degree to education students, only five require a reading knowledge of a foreign language for this particular degree.

We find much greater universality on the requirement of a thesis or some type of research for a degree than we do on the foreign-language requirement. Of the 43 universities studied, the number requiring some kind of research or a thesis for the various degrees is as follows: Master of Arts, 22; Master of Education, nine; Doctor of Education, 18; Doctor of Philosophy, 31; Master of Science, seven. In addition to these, a number of the deans stated that the requirement of a thesis was optional. Others stated that a thesis is not required, but that a paper showing the ability of the student to do research is required. Others mentioned that in lieu of a thesis certain courses are required. It would appear then from a study of the various replies that, in all the universities, some emphasis is put on the research aspect before a degree is granted.

The third question the deans were asked was this: "Is the graduate work for the Master's degree in your institution just another year's work or does it have distinct qualities that set it off from the undergraduate work? If it does have distinct qualities of its own, what are they?"

Every dean, except two, stated that the graduate courses in his school did have distinct qualities that set them off from the undergraduate work. Among the qualities mentioned were these: the requirement of a thesis; the maintenance of a certain graduate standard; special course requirements, cognate or otherwise; special research other than a thesis; longer assignments; seminars; previous education work; scholastic standing before entering graduate work; independent ability shown in work taken; written reports; comprehensive examinations, and oral examinations. One dean stated, "No candidate will be awarded a degree in our school who can not read and write English with a reasonable degree of skill." Many universities which do not require a thesis do require some special courses or seminar, or additional residence. The following quotation from one of the deans seems to be somewhat typical:

Students who write a thesis must submit one showing evidence of originality and independent

work on a problem demanding research interests and skills. Students who are not required to write a thesis must take work in residence for an additional quarter and in addition participate in a seminar or a problems course or in some way devote special attention to the place and function of research in education. In the latter group, however, research interests are not required and no research work is undertaken.

The fourth question asked was: "Do you have a functional type of curriculum for your graduate students?"

Twenty-eight of the 43 deans answering said definitely, "Yes"; two said definitely, "No." The others replied as follows: two said, "Work is based on both interest and function"; others said that students are permitted to choose in light of their interests; six mentioned that the work the students take depends on both needs and interest; several others mentioned that the curriculum taken by a student is dependent upon a conference between him and his adviser; one dean called attention to the fact that the state board requirements for teachers in his state are such that the college of education has not much to do with the requirements.

The fifth question was this: "Do you consider the chief value of graduate work to be to train the students for a position or to develop the techniques of research and a research attitude of mind?"

Eleven deans said definitely that the chief value was to train the students for a position; five put the emphasis on techniques of research, while fourteen said that both aspects were utilized in their schools. Among the other answers given as to what they consider the chief value of graduate work in education are the following: to develop a professional attitude and efficiency; to develop ability to analyze and critically study problems, and to develop the capacity for adjustment; to unite scholarship with professional understanding and personal effectiveness for teaching; to develop a functional understanding of the contribution of education to our contemporary social scene. One dean writes, "Our Ed.D. degree puts the emphasis on professional understanding, but our Ph.D. degree places the emphasis primarily on research attitudes." One of the deans explains his thinking on this point in these words:

It seems to me that the chief purpose of graduate work depends upon the needs and purposes of the student and his existing strength and weaknesses. For pre-service teachers, the training of students for positions would be most important; for students looking forward to research positions, the development of techniques of research and research attitudes of mind would be outstanding; to the majority of students with us now who are working on the Master's level, the provision for improvement in services is most important.

Question number six was, "What per cent. of the work which your graduate students take for the various degrees is prescribed by the faculty?" Several of the deans could not answer this question very definitely as it depended upon a number of factors. Based on 33 replies, however, this question indicates that for the Master's degree, requirements vary from 10 per cent. to 95 per cent. of the total work taken, with a median of approximately 25 per cent. For the Ph.D. degree, the requirement runs much less, although here it varies from 10 per cent. to 75 per cent. For the Ed.D. degree, approximately 50 per cent. of the work is specified, with one or two of the deans stating that the amount required depends upon the recommendations of a special committee. Some of the deans who could not answer this question in terms of percentages stated that only certain courses were prescribed, while others stated that no course was required. Other deans stated that certain courses were required for some students but not for others.

Replies to question number seven, "Is the tendency to prescribe the work for graduate students increasing or decreasing at your institution," indicate no definite tendency in either direction. Ten deans stated definitely that their requirements are decreasing, while 11 stated definitely that their requirements are increasing. Twelve stated that there has been no change. Perhaps the following quotation from one of the deans is typical of the thinking of a large percentage of those replying to this question:

While we do not rigidly prescribe a large percentage of the subjects, the adviser who must approve all programs is responsible for seeing to it that the courses selected form a coherent program or a proper grouping of subjects for the objectives sought. We have avoided "strait-jacketing" our graduate work by prescribing in advance a large

number of courses for students prior to our working with them. As we work with our students, our "prescriptions" are made.

The final question asked was this: "Has there been a conscious attempt to develop a philosophy of education on the graduate level for your institution?"

Thirty of the 43 deans stated definitely that there had been a conscious endeavor on the part of their faculties to develop a sound philosophy. Four believe that the philosophy of their graduate work has more or less "grown up." Others stated that recently they have been giving serious effort to the problem, and one stated that his faculty had been consciously attempting to shape it, but he did not know whether it was for the better or for the worse. One dean stated as a part of his philosophy that his faculty is definitely attempting to get the students in his graduate school to work *with* the faculty and not *for* the faculty. Another dean writes on this subject as follows:

> The faculty has been engaged in an almost continuous study of functions and policies since the beginning of the depression. . . . Among the factors which we must take into account are the following: the development of state-supported institutions which are now doing work which we formerly did, making it necessary for us to reconsider our functions in the total program of American education; population trends in relation to the need for trained leadership in education and keeping our training programs geared to the actual demands for leadership in the field; the effect of the defense program on American education in general and upon the demands for preparation on the part of our school in particular, and the growing tendency for boards of education and colleges and universities to employ persons who have received their preparation within the state, which limits the mobility and free interchange of professional workers throughout the country.

Each dean was asked to state what he conceived to be some of the basic problems in the graduate field in his own institution. A lengthy list of these problems was mentioned and most of them are well worth consideration. I have tried, however, to group them under the following three headings:

1. Problems dealing with better selection of candidates for graduate work.

It is quite evident that the acceptance of students in graduate work merely on the basis of graduation from a standard college can not assure us of high-grade students in the graduate field. It seems to me that our graduate schools of education should adopt a plan similar to that which has been followed by medical schools for a number of years; namely, to endeavor to get those graduates who have the highest scholastic achievement and who show the greatest promise in their respective fields. Since there is so much difference in quality of work done in colleges and universities on the undergraduate level, some kind of tests should be given, in addition to the requirement of a high scholastic standing. Tests of adaptability, personality, interest and mental hygiene should supplement the requirement of a degree from a standard college. Of course, there is always the possibility of getting our standards too high. One dean infers this in the following statement: ". . . There is obviously a major problem here of keeping our standards within the limits of professional demands. If we select too rigorously, we shall not meet the needs of the field."

2. Problems related to instruction.

A number of problems mentioned by the deans might well be listed under this heading. They pertain to clear-cut objectives; content of courses; relationship between research and field work; the proper type of faculty, and the best methods of instruction.

How properly to relate the content of education and subject-matter courses is a problem of crucial importance. One dean complains that the subject-matter specialists are not sufficiently interested in students of education to give them the necessary subject-matter courses. Another points out that too many of the students take all their work in education and not enough in subject-matter fields. This, I am sure, is a difficulty in a number of universities, in so far as the *teachers* majoring in education are concerned; perhaps it is not true with administrators. I believe that graduate students who are planning to teach some subject in the high school or college should spend at least a fair share of the time in the subject-matter field and that it is a mistake to let them take more and more professional courses. We should motivate our graduate students who plan to teach with the idea that they should become the *best* English teachers or the *best* social-science teachers possible. If we do this, a thorough knowledge of the subject-matter field is essential.

Another problem that was mentioned a number of times was one concerning the proper relationship between the content of courses and research.

A number of the deans pointed out the importance of the courses being more closely related to the field work. One or two deans mentioned that cadet teaching and cadet relationships in administrative fields are as important for graduate students as is student teaching on the undergraduate level. Likewise, follow-ups from the standpoint of supervision were hinted as essential if we are to make the content of our courses function most effectively.

Some of those answering the questionnaire believed that our research problems on which graduate students work should be narrower in scope and of a more practical nature, while others took the opposite view; namely, that they should be large basic problems.

Better methods of instruction was also mentioned a number of times. How to get more emphasis on individual work in graduate courses, including both the building of habits and the mastery of subject matter, seemed to be a difficulty in more than one school.

How to build a sound philosophy of education in each student was also mentioned. One dean commented on this subject as follows: "We have at our university through the years been definitely concerned about the philosophy that the graduate student developed while he was a student on the campus. . . . A progressive philosophy of education may be acquired in part by a study of philosophies of education. It is probable, however, that the philosophy of education that will be most helpful and most lasting will be that which is acquired while working cooperatively and participating fully with faculty and students alike in a program."

Other suggestions which dealt more or less directly with the techniques of teaching referred to the need for clinical programs, more laboratory work, a better motivated faculty and a more definite distinction between the work for the Ph.D. and the Ed.D. degrees.

3. Problems related to guidance and evaluation. There is considerable evidence that the deans and their faculties are giving more attention to the question of guidance and evaluation than formerly. Several times it was pointed out that requirements for the degrees are an individual matter, based on the needs of the students as revealed by consultations with their advisers.

The following comment from one of the deans on this point is pertinent: "One of our very great concerns is the improvement of advisement, teaching and placement of students on the Master's level. Since our school is supported so largely by student fees, we have been forced to mass production on this level. Teaching groups have been encouraged to introduce comprehensive examinations and other means of raising standards. We are just now engaged in the process of reorganizing our student personnel services with a view to closer coordination and greater faculty participation in admissions, advisement and placement. Here again the problem of faculty load is a big factor."

Another dean writing on the problem of measuring the degree of efficiency has the following to say: "Our written examination is a comprehensive examination covering the field of education and is intended, of course, to test the knowledge of the candidate and his ability to answer satisfactorily problematic questions. It has another function, which is to enable us to determine whether we want the candidate to risk an oral examination. Sometimes, as must be true in other schools, a candidate does excellent work in his courses, writes a good thesis, and then makes a very poor showing in the two examinations. One of our problems is the extent to which these final examinations should determine the granting of the degree."

Summarizing the findings as revealed through this questionnaire and a study of various publications, one finds the picture of graduate work in education somewhat as follows:

1. There is a definite tendency on the part of graduate faculties in education to select with greater care applicants for the graduate field. A high scholastic standing, an entrance examination and a personality test tend to be coupled with the requirement of graduation from a standard college.

2. While the standard Ph.D. and M.A. degrees are still being offered in more institutions than are other degrees, the newer degrees, such as the Ed.D. and the M.Ed., are rapidly gaining ascendancy.

3. With the exception of the Ph.D. degree, there is not a significant tendency to require a reading knowledge of the foreign languages.

4. While most of our schools of education are attempting to build a functional type of curriculum for their graduates, they are not willing to divorce themselves from the research problems. Most of them, in fact, still require a thesis or research papers, seminars, and courses in methods of educational research, in the hope that the student will at least appreciate the research work and research techniques in the field.

5. The deans and faculties in graduate schools of education are not idly permitting the phi-

losophy of their field to develop haphazardly. The study indicates that they are keenly aware of the many problems facing them and are consciously working to bring about a better solution.

6. While some schools are increasing requirements, about an equal number are decreasing them. I believe, however, that a perusal of the literature, as well as a study of the questionnaire, does indicate that instead of definite requirements for whole classes of students, the tendency is more and more to make requirements an individual matter based on the needs of the individual student as revealed through careful guidance and counseling.

From a study of the data at hand, then, it would appear that the philosophy of education relative to our graduate schools is, as would be expected, in a state of transition. There is every indication, however, that the deans are aware of the problems involved and that they are critically studying them in an attempt to lift the whole level of the graduate work and base it on sound principles of procedure.

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RECENT *Publications*

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BURKE, ARVID J. *Teacher Salary Policies in Public Schools.* Pp. 41. New York State Teachers Association, 152 Washington Avenue, Albany. 1941.

The salary policies of a public-school system should promote the following objectives: "(1) attract qualified candidates for positions and discourage the unqualified; (2) hold able, skilful and successful personnel in the system and eliminate the unfit; (3) provide incentives and means for continued improvement in service; (4) increase efficiency and morale of all personnel by assuring adequate rest and recreation, reasonable outlays for maintenance of health, resources sufficient to meet temporary disabilities or emergencies; (5) enable teaching personnel to acquire a high cultural status for the best possible teaching; (6) permit all personnel to acquire social and economic status commensurate with their responsibilities or duties."

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CALIVER, AMBROSE. "Supervision of the Education of Negroes as a Function of State Departments of Education." *Bulletin*, 1940, No. 6, Monograph No. 11. Studies of State Departments of Education, U. S. Office of Education. Pp. vi + 45. Washington: Government Printing Office. 1941. 10¢.

This monograph deals with the origin and historical development, functions and activities of the supervision of Negro education as observed in 16 of the 17 states having separate schools for the Negro and white races.

CANNON, CARL L. (editor). *Guide to Library Facilities for National Defense* (revised). Pp. 448. American Library Association, 520 North Michigan Avenue, Chicago. 1941.

As a result of a rapid survey made in the summer and fall of 1940 by the Joint Committee on Library Research Facilities for National Defense, the preliminary edition of the present volume was issued with descriptions of the library resources for national defense of about 500 libraries. For the revised and enlarged edition (under the same editorship), a systematic effort has been made to secure information about all libraries of importance omitted from the earlier volume, and to add further details from the libraries that reported their holdings at the beginning of the project. Following suggestions from readers of the first edition, there has been a rearrangement of headings and the inclusion of new subject matter.

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MORGAN, JOHN J. B. *Workbook in Psychology.* Pp. iv + 120. Farrar and Rinehart, Inc. 1941. 80¢.

Including chapters on "The Scientific Attitude," "Heredity and Environment," "Prenatal and Infant Development," "Intelligence," "Springs of Action," "Social Motives," "Emotional Behavior" and "The Acquisition of Motor Skills." The workbook features include chiefly true-false, matching and completion tests, enumeration questions and questions for either class discussion or essay-type examinations.

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Portsmouth and National Defense—a series of articles—reprinted from *The Portsmouth Herald*, Portsmouth, N. H. Pp. 95. 1941.

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School of the Air of the Americas, Teacher's Manual, 1941–42. Pp. 126. Columbia Broadcasting System, Inc., 485 Madison Avenue, New York. 1941.

This manual answers such questions as: "What Is the School of the Air?" "Why Has It Been Expanded?" "What Is Its Educational Standing?" "What Is the New Link to the Red Cross?" "How Are International Operations Carried On?" "How Are Broadcasts Used?" "How Are Programs Evaluated?" Its chief purpose, however, is to outline the programs that are to be broadcast during the coming school year, with suggestions as to the use of the broadcasts in the classroom, carefully prepared lists of reference books and films and suggestions for correlated class activities. The manual is sent without cost to school administrators and classroom teachers who contemplate using the broadcasts.

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TULEEN, LAWRENCE F., WILLARD L. MUEHL and GEORGE S. PORTER. *Test It Yourself!*—Chemistry Experiments with Consumer Applications. Pp. vi + 290. Illustrated. Scott, Foresman. 1941. 96¢, list; teachers' edition, $1.08, list.

Pointing out the wide applicability of the principles of chemistry and how they may be used to advantage in everyday life, this laboratory workbook may be used with almost any high-school text as a guide to a laboratory course or as a supplement to laboratory work.

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VARICK, ELIZABETH. *Dress Accessories You Can Make.* Pp. 39. Illustrated. Home Institute, 109 West 19th Street, New York. 1941. 15¢.

Suggestions for sports' and daytime wear, as well as "for dress-up occasions," that add the finishing touch to one's appearance.

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WRIGHT, MARION M. THOMPSON. *The Education of Negroes in New Jersey.* Pp. ix + 227. Bureau of Publications, Teachers College, Columbia University. 1941. $2.35.

An historical survey, carefully documented, of social factors that influenced the development of educational opportunities for Negroes in the state of New Jersey. A Ph.D. dissertation.